

# **Project Investment Justification**

# myDEQ FY19

# EV18003

# Department of Environmental Quality

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# 1. GENERAL INFORMATION

**PIJ ID:** EV18003

PIJ Name: myDEQ FY19

**Account:** Department of Environmental Quality

**Business Unit Requesting: ADEQ** 

Sponsor: Michael Keyack

**Sponsor Title:** Deputy Director for Administration **Sponsor Email:** keyack.michael@azdeq.gov

**Sponsor Phone:** (602) 771-0095

## 2. MEETING PRE-WORK

2.1 What is the operational issue or business need that the Agency is trying to solve? (i.e....current process is manual, which increases resource time/costs to the State/Agency, and leads to errors...):

The Arizona Department of Environmental Quality (ADEQ) processes roughly 28,000 transactions annually, in paper format, for various permits and reports, and receives payments from roughly 16,000 facilities. This causes ADEQ and the regulated community to enter data multiple times, increasing the amount of re-work, and causes manual reporting. All of this manual effort is error-prone and time-consuming resulting in an unnecessarily long time to issue permits, an increased number of facilities being out of compliance, and an inefficient process for our customers.

## 2.2 How will solving this issue or addressing this need benefit the State or the Agency?

Implementing the next phase of the myDEQ portal will continue to improve environmental compliance by the regulated community. The public will benefit from more convenient access to public records and environmental information. Automating additional business processes will lead to faster, higher quality inputs from the regulated community.

## 2.3 Describe the proposed solution to this business need.

The myDEQ FY19 program proposes to develop additional online services. This is a continuation of the development efforts after the completion of myDEQ FY17 & FY18. It will continue to leverage the architecture and foundation deployed during Phase 1.

To describe the solution further - the myDEQ application is a 3-tier architectural solution. The Presentation layer is developed using XML, CSS 3.0, Javascript, and Bootstrap framework. The Application/middle-tier leverages WSO2 products such as Application Server, ESB, DSS and Identity server. Finally, the Data layer is an Oracle 11g database known as the Arizona Unified Repository for Informational Tracking of the Environment (AZURITE). The myDEQ application is currently hosted in the ADEQ data center, but we are working with ADOA-ASET to migrate the application to ASET's new AESP platform built on AWS by June 2018.

ADEQ will continue using independent third-party reviews and lessons learned during the life of the project.



2.4 Has the existing technology environment, into which the proposed solution will be implemented, been documented?
Yes
2.4a Please describe the existing technology environment into which the proposed solution will be implemented.
2.5 Have the business requirements been gathered, along with any technology requirements that have been identified?
No
2.5a Please explain below why the requirements are not available.
The services identified to be migrated online will be value stream mapped and leaned (eliminating waste) prior to the launch of this project. Business and technology requirements will be mapped out as part of the project and then developed in an agile scrum project methodology.
3. Pre-PIJ/Assessment
3.1 Are you submitting this as a Pre-PIJ in order to issue a Request for Proposal (RFP) to evaluate options and select a solution that meets the project requirements?
No
3.1a Is the final Statement of Work (SOW) for the RFP available for review?
3.2 Will you be completing an assessment/Pilot/RFP phase, i.e. an evaluation by a vendor, 3rd party or your agency, of the current state, needs, & desired future state, in order to determine the cost, effort, approach and/or feasibility of a project?
No
3.2a Describe the reason for completing the assessment/pilot/RFP and the expected deliverables.
3.2b Provide the estimated cost, if any, to conduct the assessment phase and/or Pilot and/or RFP/solicitation process.
3.2e Based on research to date, provide a high-level cost estimate to implement the final solution.
4. Project
4.1 Does your agency have a formal project methodology in place?

Yes



4.2 Describe the high level makeup agency will dovendor will dothi	•	es of the A	gency, Vendor(s) and other third parties (i.e.
Project Management - Agency			
Business Analysis - Agency			
Application Development - Agency	and Contractors		
Quality Analysis (QA) - Agency and	Contractors		
Network Configuration & DevOps -	- Agency		
Independent Assessment and Valid	lation of the project - 3rd	d Party	
4.3 Will a PM be assigned to manag	ge the project, regardles	s of wheth	er internal or vendor provided?
Yes			
4.3a If the PM is credentialed, e.g.,	PMP, CPM, State certific	cation etc.	, please provide certification information.
4.4 Is the proposed procurement tl	he result of an RFP solici	tation pro	cess?
No			
4.5 Is this project referenced in you	ur agency's Strategic IT P	lan?	
Yes			
<ul><li>5. SCHEDULE</li><li>5.1 Is a project plan available that r supporting Milestones of the proje</li></ul>		art Date aı	nd End Date of the project, and the
Yes			
5.2 Provide an estimated start and	·		·
Est. Implementation Start Date			mentation End Date
7/1/2018 12:00:00 AM		6/30/2019	12:00:00 AM
5.3 How were the start and end da	tes determined?		
Based on project plan			
	•		ect, e.g., acquire new web server, develop estimate start/finish dates for each, if known.
Milestone / Task	Estimated Start Date		Estimated Finish Date



5.4 Have steps needed to roll-out to all impacted parties been incorporated, e.g. communications, planned outages, deployment plan?
Yes
5.5 Will any physical infrastructure improvements be required prior to the implementation of the proposed solution. e.g., building reconstruction, cabling, etc.?
No
5.5a Does the PIJ include the facilities costs associated with construction?
5.5b Does the project plan reflect the timeline associated with completing the construction?
6. Impact
6.1 Are there any known resource availability conflicts that could impact the project?
No
6.1a Have the identified conflicts been taken into account in the project plan?
6.2 Does your schedule have dependencies on any other projects or procurements?
No
6.2a Please identify the projects or procurements.
6.3 Will the implementation involve major end user view or functionality changes?
Yes
6.4 Will the proposed solution result in a change to a public-facing application or system?
Yes
7. Budget
7.1 Is a detailed project budget reflecting all of the up-front/startup costs to implement the project available, e.g, hardware, initial software licenses, training, taxes, P&OS, etc.?
Yes
7.2 Have the ongoing support costs for sustaining the proposed solution over a 5-year lifecycle, once the project is complete, been determined, e.g., ongoing vendor hosting costs, annual maintenance and support not acquired upfront, etc.?
Yes



7.3 Have all required funding sources for the project and ongoing support costs been identified?
Yes
7.4 Will the funding for this project expire on a specific date, regardless of project timelines?
Yes
7.5 Will the funding allocated for this project include any contingency, in the event of cost over-runs or potential
changes in scope?
No
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8. Technology
8.1 Please indicate whether a statewide enterprise solution will be used or select the primary reason for not
choosing an enterprise solution.
The project is using a statewide enterprise solution
8.2 Will the technology and all required services be acquired off existing State contract(s)?
Yes
8.3 Will any software be acquired through the current State value-added reseller contract?
No
8.3a Describe how the software was selected below:
8.4 Does the project involve technology that is new and/or unfamiliar to your agency, e.g., software tool never
used before, virtualized server environment?
No
8.5 Does your agency have experience with the vendor (if known)?
Yes
8.6 Does the vendor (if known) have professional experience with similar projects?
Yes
8.7 Does the project involve any coordination across multiple vendors?
No
8.8 Does this project require multiple system interfaces, e.g., APIs, data exchange with other external application
systems/agencies or other internal systems/divisions?
Yes

8.9 Have any compatibility issues been identified between the proposed solution and the existing environment, e.g., upgrade to server needed before new COTS solution can be installed?
No
8.9a Describe below the issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you.
8.10 Will a migration/conversion step be required, i.e., data extract, transformation and load?
Yes
8.11 Is this replacing an existing solution?
No
8.11a Indicate below when the solution being replaced was originally acquired.
8.11b Describe the planned disposition of the existing technology below, e.g., surplused, retired, used as backup, used for another purpose:
8.12 Describe how the agency determined the quantities reflected in the PIJ, e.g., number of hours of P&OS, disk capacity required, number of licenses, etc. for the proposed solution?
They are estimated based on the analysis of business requirements identified for myDEQ FY19.
8.13 Does the proposed solution and associated costs reflect any assumptions regarding projected growth, e.g., more users over time, increases in the amount of data to be stored over 5 years?  Yes
8.14 Does the proposed solution and associated costs include failover and disaster recovery contingencies?
Yes
8.14a Please select why failover and disaster recovery is not included in the proposed solution.
8.15 Will the vendor need to configure the proposed solution for use by your agency?
No
8.15a Are the costs associated with that configuration included in the PIJ financials?
8.16 Will any app dev or customization of the proposed solution be required for the agency to use the project in the current/planned tech environment, e.g. a COTS app that will req custom programming, an agency app that will be entirely custom developed?
Vac



8.16a Will the customizations inhibit the ability to implement regular product updates, or to move to future versions?
No
8.16b Describe who will be customizing the solution below:
Agency staff and contractors
8.16c Do the resources that will be customizing the application have experience with the technology platform being used, e.g., .NET, Java, Drupal?
Yes
8.16d Please select the application development methodology that will be used:
Agile/Scrum
8.16e Provide an estimate of the amount of customized development required, e.g., 25% for a COTS application, 100% for pure custom development, and describe how that estimate was determined below:
100%
8.16f Are any/all Professional & Outside Services costs associated with the customized development included in the PIJ financials?
Yes
8.17 Have you determined that this project is in compliance with all applicable statutes, regulations, policies, standards & procedures, incl. those for network, security, platform, software/application &/or data/info found at aset.az.gov/resources/psp?
Yes
8.17a Describe below the compliance issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you:
8.18 Are there other high risk project issues that have not been identified as part of this PIJ?
No
8.18a Please explain all unidentified high risk project issues below:
9. Security
9.1 Will the proposed solution be vendor-hosted?
No No
9.1a Please select from the following vendor-hosted options:



9.1b Describe the rationale for selecting the vendor-hosted option below:
9.1c Has the agency been able to confirm the long-term viability of the vendor hosted environment?
9.1d Has the agency addressed contract termination contingencies, e.g., solution ownership, data ownership, application portability, migration plans upon contract/support termination?
9.1e Has a Conceptual Design/Network Diagram been provided and reviewed by ASET-SPR?
9.1f Has the spreadsheet located at https://aset.az.gov/arizona-baseline-security-controls-excel already been completed by the vendor and approved by ASET-SPR?
9.2 Will the proposed solution be hosted on-premise in a state agency?
No
9.2a Where will the on-premise solution be located:
9.2b Were vendor-hosted options available and reviewed?
9.2c Describe the rationale for selecting an on-premise option below:
9.2d Will any data be transmitted into or out of the agency's on-premise environment or the State Data Center?
9.3 Will any PII, PHI, CGIS, or other Protected Information as defined in the 8110 Statewide Data Classification Policy be transmitted, stored, or processed with this project?
No
9.3a Describe below what security infrastructure/controls are/will be put in place to safeguard this data:
10. Areas of Impact
Application Systems  Application Enhancements; Arizona Enterprise Solution Platform (AESP) based Application; New Application
Development
Database Systems
Database Consolidation/Migration/Extract Transform and Load Data;Oracle
Software
Open Source;Other
Custom build
Hardware



Hosted Solution (Cloud Implementation)
Amazon (AWS) GovCloud
Security
Telecommunications
Enterprise Solutions
E-Signatures;Document Management/Imaging;eLicensing
Contract Services/Procurements

# 11. FINANCIALS

Description	PIJ Category	Cost Type	Fiscal Year Spend	Quantity	Unit Cost	Extended Cost	Tax Rate	Тах	Total Cost
3rd party Independent verification and validation of the project	Professio nal & Outside Services	Develop ment	1	600	\$135	\$81,000	0.00 %	\$0	\$81,000
Application Software - Design, Build and Test	Professio nal & Outside Services	Develop ment	1	41112	\$71	\$2,918,952	0.00 %	\$0	\$2,918,952
ASET Enterprise Solution (AESP)	Other	Operatio nal	1	1	\$200,000	\$200,000	0.00 %	\$0	\$200,000

Base Budget (Available)	Base Budget (To Be Req)	Base Budget % of Project
\$0	\$0	0%
APF (Available)	APF (To Be Req)	APF % of Project
\$0	\$3,200,000	100%
Other Appropriated (Available)	Other Appropriated (To Be Req)	Other Appropriated % of Project
\$0	\$0	0%
Federal (Available)	Federal (To Be Req)	Federal % of Project
\$0	\$0	0%
Other Non-Appropriated (Available)	Other Non-Appropriated (To Be Req)	Other Non-Appropriated % of Project
\$0	\$0	0%

Total Budget Available	Total Development Cost
\$0	\$2,999,952
Total Budget To Be Req	Total Operational Cost
\$3,200,000	\$200,000
Total Budget	Total Cost
\$3,200,000	\$3,199,952

## 12. Project Success

Please specify what performance indicator(s) will be referenced in determining the success of the proposed project (e.g. increased productivity, improved customer service, etc.)? (A minimum of one performance indicator must be specified)

Please provide the performance objective as a quantifiable metric for each performance indicator specified. **Note:** The performance objective should provide the current performance level, the performance goal, and the time period within which that performance goal is intended to be achieved. You should have an auditable means to measure and take corrective action to address any deviations.

**Example**: Within 6 months of project completion, the agency would hope to increase "Neighborhood Beautification" program registration by 20% (3,986 registrants) from the current registration count of 19,930 active participants.



#### Performance Indicators

- o Increased customer satisfaction rating from citizens and businesses.
- o Increase the percentage of agency services provided online to 44%.
- o Sustain the target of returning facilities to compliance within 90 days.
- o Sustain the target of 80% of all facilities to be compliant at the time of inspection.
- o Improve permit lead time beyond the current target of 45 days.

## 13. CONDITIONS

#### Conditions for Approval

Should the final costs exceed the estimated costs by 10% or more, or should there be significant changes to the proposed technology, scope of work or implementation schedule, the Agency must amend the PIJ to reflect the changes and submit it to ADOA-ASET for review and approval prior to further expenditure of funds.

## 14. Engagement Manager Comments

### **Project Background**

The Arizona Department of Environmental Quality has a multi-year strategy of migrating all citizen and regulated community services online, to help speed up licensing and increase compliance. This PIJ is a continuation of those efforts, and in prior years DEQ has already built the platform, and enabled a portfolio of services. The FY19 project work will continue these initiatives.

### **Business Justification**

DEQ has already invested in building the platform, and has deployed a portion of services to citizens; this PIJ is just a continuation of that program / strategy.

### Implementation Plan

DEQ will select a portfolio of services to modernize and make available online, process stream map them and lean out the processes, then do a business requirements analysis. Finally, DEQ will develop the functionality in an Agile / Scrum methodology.

## Vendor Selection

This work is being performed in-house by DEQ, with help of some contractors who are already on State Contract via the Knowledge Services contract. Thus, no issues are identified here.

### **Budget or Funding Considerations**

There are no Budget or Funding considerations at this time, as the money was specifically identified in APF funding.

## 15. PIJ REVIEW CHECKLIST

#### **Agency Project Sponsor**

Misael Cabrera

## Agency CIO (or Designee)

**Gary Heller** 



Agency ISO (or designee)	
Dave Crowfoot	
OSPB Representative	
ASET Engagement Manager	
David Tischler	
ASET SPR Representative	
Agency SPO Representative	
Teena Ziegler	
Agency CFO	
Russell Gardner	